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REMARKS

The Office Action of May 5, 2006, was received and its contents carefully reviewed. Claims 39, 40, 42-56, 59-61, 70, and 71 were pending. Applicants amended claims 40, 54, 55, 56, 61, 70, and 71 to correct minor informalities. Additionally, Applicants amended claims 39, 40, 54, 55, 56, 61, 70, and 71 to highlight additional features of the present invention and to add additional context to the claims. The features incorporated in the above amendments are disclosed at least in paragraphs on page 6, lines 13-16; page 22, lines 23-26; and section 2.4 beginning on page 27, line 13 and throughout the Specification. Applicants added new claims 72-74 reciting similar features in non-means-plus-function format as are recited in pending means-plus-function claims 56, 59, and 60. Support for the new claims is disclosed in the Specification at least starting on page 19, line 5 to page 25, line 16 and throughout the Specification.

Applicants respectfully submit that no new matter was introduced by these amendments. As now recited, claims 39, 40, 42-56, 59-61, 70-74 are currently pending and are believed to be in condition for allowance. Applicants respectfully request reconsideration of this application in light of the above amendments and the following remarks.

A. Priority

Applicants thank the Examiner for acknowledgment and acceptance of the claim for foreign priority under 35 U.S.C. § 119 and receipt of certified copies of the priority documents.

B. Drawings

Applicants thank the Examiner for acknowledgment and acceptance of the Drawings filed on September 22, 2004.

C. Continued Examination Under 37 CFR § 1.114

Applicants thank the Examiner for acknowledgment and acceptance of the present application for continued examination under 37 CFR § 1.114.

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D. Claim Objections

In the May 5, 2006, Office Action, the Examiner objected to claims 40, 54, 55, 56, 61, 70, and 71 for informalities related to omission of the adjective "determining" as modifying the word "data." Likewise, the Examiner objected to the verb tense "is" with regard to the failure of retrieval information. Applicants appreciate the Examiner's suggestions for correction and have implemented the suggested changes in the above amendments. As such, Applicants respectfully request reconsideration and withdrawal of the objection.

E. Claim Rejections Under 35 U.S.C. § 102

Claims 39, 40, 48-50, 54-56, 70, and 71 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Richards et al. U.S. Patent Number 6,237,146 (the '146 patent). In view of the amendments above and the comments below, Applicants respectfully request reconsideration and withdrawal of this rejection.

The present invention is generally directed to a data transceiving system including a broadcasting section, television receivers, and response information receiving equipment. With this configuration, the system achieves improved delayed transmission between each television receiver and the response information receiving equipment. Specifically, the broadcasting station transmits data to television receivers through broadcasting. Each television receiver then transmits response information to the response information receiving equipment by way of a separate communication line, that is, one that is different than the broadcasting line.

As discussed previously, the '146 patent relates only to delay transmission between the AMI and the DVHT. With reference to the Figure 1 of the present application, the system of the present invention includes two separate communication paths as shown in Figure 1. The first communication path connects the broadcasting station to each television receiver. The broadcasting station transmits data to the receivers through the first path irrespective of receiving the data by each receiver. Processing of a delay transmission is not possible and moreover is unnecessary between the broadcasting station and the receivers in that the broadcasting station unilaterally broadcast the data through the first path. The second path is a communication line between each television receiver and the response information receiving equipment. The separate communication line can transmit the data insofar as

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interactive acknowledgement is made. Accordingly, with the present invention, the broadcasting station transmits the information to the television receivers through the first path for controlling the delayed transmission used in the second path. This is clearly not the case with the '146 patent. These features are highlighted in amended independent claims 39, 40, 54, 55, 56, 61, 70, and 71.

In contrast, the '146 patent has a single communication path between AMI and the DVHT. The system of the '146 patent transmits interactively between the AMI and DVHT and employs a delayed transmission, because there is only a single communication path. Since the AMI needs to communicate with the DVHT's, the delayed transmission between the AMI and each DVHT is indispensable and unavoidable.

Additionally, the system of the present invention includes a manner of calculating transmission scheduling time for the transmission of the second transmission and onwards that is not disclosed by the '146 patent. That is, the system of the present invention includes television receivers that receive determining data for determining initial transmission scheduling time and retrieval information containing a retrieval period transmitted by the broadcasting station. The initial transmission scheduling time is calculated with a random number at each of the receivers using the determining data for determining initial transmission scheduling time. Further, the response information is received via a separate communication line when the initial transmission scheduling time comes. The '146 patent fails to disclose these features of the present invention. These features are highlighted in amended independent claims 39, 40, 54, 55, 56, 61, and 70.

Accordingly, with the system of the present invention, data for determining initial transmission scheduling time from the broadcasting station used for generating random numbers at each receiver and a retrieval period are transmitted at the first transmission. Each television receiver that received the transmitted data calculates the initial transmission scheduling time with random numbers. In carrying out such a process, the present invention achieves a number of benefits, namely, the initial transmission scheduling time can be varied by each of the receivers even when the situation is in a one-to-many relationship such as occurs in broadcasting; the response time for the second transmission and onwards are determined by adding a retrieval period for the initial transmission scheduling time. Since the initial transmission scheduling time is calculated with random numbers at each receiver, the response time is varied for the second transmission and onwards. With this configuration, it

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is possible to reduce processing liability for each receiver, in that each receiver does not need to calculate random numbers except for the initial transmission; and it is necessary to transmit fewer parameters from the broadcast station. The number of parameters in accordance with the present invention is two, for example, the initial transmission scheduling time and the retrieval.

Such benefits may not be achieved using the system of the '146 patent. For example, the '146 patent discloses that the AMI 23 calculates each transmission scheduling time, i.e., both the initial and the second and later transmission times, with random numbers. Also, '146 patent discloses that the initial transmission scheduling time may be calculated by the DVHT (Set-Top-Box) in place of the AMI 23. The '146 patent, however, does not disclose that the initial transmission scheduling time is calculated with random numbers and that the response time for the second and subsequent transmissions are calculated by adding the retrieval period to the retrieval transmission scheduling time as is specifically recited in the independent claims of the present application.

Instead, the system of the '146 patent must transmit to each receiver the product of the number of parameters to the back-off array multiplied by the number of retry times because the random numbers must be generated by the back-off array for every transmission. This manner of transmitting is cumbersome and incorporates inherent delays in the transmission process. The system of the present invention improves transmissions between each television receiver and the response information receiving equipment by the process outlined in the independent claims of the present application. The '146 patent fails to disclose these features as recited in amended independent claims 39, 40, 54, 55, 56, 61, 70, and 71.

As such, Applicants respectfully request reconsideration of amended independent claims 39, 40, 54, 55, 56, 70, and 71 and withdrawal of the rejection under 35 U.S.C. § 102(e).

Dependent claims 48-50 are ultimately dependent upon amended independent claim 40, and thereby include all the limitations of independent claim 40, while reciting additional features of the present invention. As noted above, Applicants amended independent claim 40 to include limitations not disclosed by the '146 patent. Accordingly, with the dependency of claims 48-50 on amended independent claim 40, Applicants respectfully submit that this claim is likewise in proper condition for allowance and respectfully requests the reconsideration of this claim and the withdrawal of the rejection under 35 U.S.C. § 102.

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F. Claim Rejections Under 35 U.S.C. § 103

Claims 42, 51-53, and 59 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Richards et al. U.S. Patent Number 6,237,146 (the '146 patent). In view of the amendments above and the comments below, Applicants respectfully request reconsideration and withdrawal of this rejection.

As outlined above, dependent claim 42, and claims 51-53 ultimately depend upon amended independent claim 40, while dependent claim 59 depends upon amended independent claim 56. Therefore, these dependent claims include all the limitations of independent claims 40 and 56, respectively, while reciting additional features of the present invention. As noted above, Applicants amended independent claims 40 and 56 to include limitations not disclosed by the '146 patent. Accordingly, with the dependency of claims 42 and 51-53 on amended independent claim 40, and the dependency of claim 59 on amended independent claim 56, Applicants respectfully submit that the '146 patent fails to disclose the recited features and that these claims are likewise in proper condition for allowance. Applicants respectfully request the reconsideration of these claims and the withdrawal of the rejection under 35 U.S.C. § 103.

Similarly, claims 43, 47, and 60 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Richards et al. U.S. Patent Number 6,237,146 (the '146 patent) in view of Corrigan et al. U.S. Patent Number 5,966,636 (the '636 patent). In view of the amendments above and the comments below, Applicants respectfully request reconsideration and withdrawal of this rejection.

As outlined above, dependent claims 43 and 47 ultimately depend upon amended independent claim 40, while dependent claim 60 depends upon amended independent claim 56. Therefore, these dependent claims include all the limitations of independent claims 40 and 56, respectively, while reciting additional features of the present invention. As noted above, Applicants amended independent claims 40 and 56 to include limitations not disclosed by the '146 patent. Further, the '636 patent fails to cure the deficiencies of the '146 patent, namely the features recited in the amended independent claims directed to the separate communication lines and the calculation of the initial transmission scheduling time with a random number at each of the receivers. Accordingly, with the dependency of claims 43 and 47 on amended independent claim 40, and the dependency of claim 60 on amended

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independent claim 56, Applicants respectfully submit that the combination of the '146 patent and the '636 patent fails to disclose the recited features and that these claims are likewise in proper condition for allowance. Applicants respectfully request the reconsideration of these claims and the withdrawal of the rejection under 35 U.S.C. § 103.

Also, claims 44-46 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Richards et al. U.S. Patent Number 6,237,146 (the '146 patent) in view of Corrigan et al. U.S. Patent Number 5,966,636 (the '636 patent) in further view of Lowell U.S. Patent Number 6,012,086 (the '086 patent). In view of the amendments above and the comments below, Applicants respectfully request reconsideration and withdrawal of this rejection.

As outlined above, dependent claims 44-46 ultimately depend upon amended independent claim 40. Therefore, these dependent claims include all the limitations of independent claim 40, while reciting additional features of the present invention. As noted above, Applicants amended independent claim 40 to include limitations not disclosed by the '146 patent. Further, the '636 patent and the '086 patent fail to cure the deficiencies of the '146 patent, namely the features recited in the amended independent claims directed to the separate communication lines and the calculation of the initial transmission scheduling time with a random number at each of the receivers. Accordingly, with the dependency of claims 44-46 on amended independent claim 40, Applicants respectfully submit that the combination of the '146 patent, the '636 patent, and the '086 patent fails to disclose the recited features and that these claims are likewise in proper condition for allowance. Applicants respectfully request the reconsideration of these claims and the withdrawal of the rejection under 35 U.S.C. § 103.

Claim 61 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Gammie et al. U.S. Patent Number 5,270,809 (the '809 patent) in view of Richards et al. U.S. Patent Number 6,237,146 (the '146 patent). In view of the amendments above and the comments below, Applicants respectfully request reconsideration and withdrawal of this rejection.

The present invention is generally directed to a data transceiving system including a broadcasting section, television receivers, and response information receiving equipment. With this configuration, the system achieves improved delayed transmission between each television receiver and the response information receiving equipment. Specifically with regard to claim 61, the receiver transmits response information to the response information

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receiving equipment by way of a separate communication line, that is, one that is different than the broadcasting line. Additionally, the receiver calculates the initial transmission scheduling time with a random number at each receiver using the determining data for determining initial transmission scheduling time. These features are not disclosed by the combination of the '809 patent and the '146 patent.

As discussed previously, the '146 patent relates only to delay transmission between the AMI and the DVHT. With reference to the Figure 1, the system of the present invention includes two separate communication paths. The first communication path connects the broadcasting station to each television receiver. The broadcasting station transmits data to the receivers through the first path irrespective of receiving the data by each receiver. Processing of a delay transmission is not possible and moreover is unnecessary between the broadcasting station and the receivers in that the broadcasting station unilaterally broadcast the data through the first path. The second path is a communication line between each television receiver and the response information receiving equipment. The separate communication line can transmit the data insofar as interactive acknowledgement is made. Accordingly, with the present invention, the broadcasting station transmits the information to the television receivers through the first path for controlling the delayed transmission used in the second path. This is clearly not the case with the '146 patent and the '809 patent fails to disclose these features as well. These features are highlighted in amended independent claim 61.

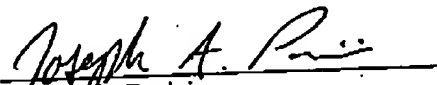
As such, Applicants respectfully request reconsideration of amended independent claim 61 and withdrawal of the rejection under 35 U.S.C. § 103(a).

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G. Conclusion

In view of the above amendments and remarks, Applicants respectfully request reconsideration of this application and the timely allowance of the pending claims. If the Examiner believes a conference would be of benefit in expediting the prosecution of the present application, please telephone Applicants' counsel to arrange such a conference.

Respectfully submitted,


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